Interdisciplinary Masters' Program in Information Security
Department of Communication Requirements

In addition to the courses listed in the requirement areas, the various departments and programs occasionally offer new courses and courses on specific topics that may meet area requirements, especially when they are taught by CERIAS principals and fellows. These include TECH 621 (when taught by Prof. Dark), CNIT 623 and 499 (Prof. Taylor), CNIT 581, LING 689 (Prof. Raskin), some CS 590 offerings, and others. The INSC program administration will announce such courses when they are available, but students are welcome to ask about any courses that might not be otherwise listed.

Area A. Core Courses (6)

--- CS 52600   Information Security   **or**   CNIT 55500 Advanced Network Security
--- CS 55500   Cryptography
--- PHIL 52400   **or**   PHIL 62400†   **or**   TECH 62100
   Contemporary Ethical Theory   Seminar in Ethics   Information Assurance Ethics
---May substitute PHIL 411 or PHIL 424 if PHIL 52400 is Not offered in a year
--- POL 62000† Proseminar in Public Policy **OR** --- TECH 62100 Tech & Policy
--- COM 69800   Research MA or MS Thesis (for the thesis option only)

**PHIL 58000 is no longer available, but if you have already taken PHIL 58000, it will be recognized as meeting your requirements.

Area B. Recommended Courses (3)

One of the following courses:

COM 51800	Theories Of Persuasion
COM 55800	Historical Trends In Mass Communication Research
COM 55900	Current Trends In Mass Communication Research
COM 57400	Organizational Communication
COM 59000†	Directed Study Of Special Problems
COM 63200†	Special Topics In Mass Communication

Any two of the following courses:

--SFS Students must take *Applied Research Problems in National Information Security* TECH 58100

Dept	No.	Title	Dept	No.	Title
AGEC	60800	Benefit-Cost Analysis		52800	Network Security
	69100†	Research in Agricultural Economics		53600§	Data Communication and Computer Networks
CNIT	42100	Small Scale Digital Device Forensics			
	45500	Network Security		56500	Programming Languages
	45600	Wireless Network Security & Management		58000	Algorithm Design, Analysis, and Implementation
	49900†	Topics in Computer and Info Technology		59000†	Independent Study/Variable Topics
	51100	Foundations in Homeland Security			Advanced Machine Learning
	51200	Managing Resources and Applications for Homeland Security			Computer Aided Program Reasoning Network & Matrix Computations
	55600	Basic Computer Forensics			Security Analytics
	55700	Advanced Cyber forensics		62600	Advanced Information Assurance
	55800	Bioinformatics Computing And Systems Integration		63600	Internetworking
				65500	Advanced Cryptology
	58100†	Workshop in Computer Technology	CSR	63100	Consumer Behavior Theory
		File Systems Forensics	ECE	56500	Computer Architecture
		Intro Assistive Tech & Robotics	ECET	52500	Applications in Forensic Engineering Technology
		Mobile & Embedded Device Foren	ECON	60600	Microeconomic Theory I
		The Internet of Things		61000	Advanced Game Theory
		Natural Language Technologies	EDPS	53300	Intro to Educational Research I: Methodology
		Prob in Natl Info Security	ENE	69500	Adv Topics in Engineering Education
	62300†	Contemporary Computer Technology Problem	IE	53000	Quality Control
		Applied Statistics in IT		53200	Reliability
	62300	Research Methods for Computing		57700§	Human Factors in Engineering
CS	50300	Operating Systems		65900	Human Aspects of Computing
	52700	Software Security			

	67400	Computer And Communication Methods For Production Control	PHIL	52400*	Contemporary Ethical Theory
IT	53000	Biometric Technology Test Design, Performance, and Evaluation		62400†	Seminar in Ethics
			POL	62000†	Proseminar Public Policy
	54000	Biometric Performance and Usability Analysis	PSY	57700§	Human Factors in Engineering
	54500	Biometrics Technology And Applications	STAT	50200	Experimental Statistics II
	58100†	Biometric Data Analysis		51200	Applied Regression Analysis
LING	68900†	Seminar in Linguistics		51300	Statistical Quality Control
	68900	Natrl Language Process		51400	Design of Experiments
MGMT	54700§	Computer Communication Systems		51700	Statistical Inference
	68400	Information Security for Managers	TECH	58100†	Workshop in Technology
OBHR	68100	Managing Behavior in Organization		62100†	Seminar in Technology
	68300	Individual Behavior in Organizations			

Area C. Elective Courses (one of the following)

Any of the following variable topic courses, presuming instructor consent is obtained:

COM 61000† Seminar: Special Topics In Rhetorical Studies
COM 61200 Seminar: Special Topics In Interpersonal Com
COM 61800 Seminar: Special Topics In Persuasion Theory

COM 63200S Special Topics In Mass Communication
COM 67400† Seminar: Special Topics In Organizational Com
COM 67600† Seminar: Special Topics in Health Com

CNIT	58100†	Workshop in Computer Technology		53200	Semantics II: Formal and Grammatical Semanatics
	62300†	Contemporary Computer Technology Problems	MGMT	50500	Management Accounting II
**COM	59000†	Directed Study of Special Problems Communication Theory Communication & Pedagogy		50600	Auditing
				54400	Database Mangement Systems
	60000	Foundations Of Human Communication Inquiry I		54500	Systems Development
	60100	Foundations Of Human Communication Inquiry II		56100	Logistics
CS	50200	Compiling and Programming Systems		59000†	Directed Readings In Management Sem Tech Realztn Tpc II IT Project Management
	54100	Database Systems			
	54200	Distributed Database Systems		60000	Accounting for Managers
	57300	Data Mining		60100	Managerial Accounting
ECE	54400	Digital Communications		63000	Legal and Social Foundations of Management
	56200	Introduction to Data Management			
	56500	Computer Architecture		68300	Princ of Info Systems
	57000	Artificial Intelligence	OBHR	64200	Comp And Reward Syst I
	57300	Compilers And Translator Writing Systems		64300	Comp And Reward Sys II
ECET	58100†	Workshop in Elect. And Comp. Engineering Tech Selected Topics in Sensors	POL	62200	Research Seminar In Public Policy And Public Administration
FNR	55800	Digital Remote Sensing and GIS	STAT	69500†	Seminar in Mathematical Statistics
LING	50000	Introduction to Linguistics			
	53100	Semantics I: Lexical And Sentential Semantics			*(replaces TECH 64600)* (Beginning Fall 2013)

Courses from <u>at least three different graduate programs</u> should be taken between Areas B and C. Other courses, often under variable numbers and offered on a one-time or occasional basis, may be of interest. Students are encouraged to bring those courses to the attention of their advisors, who may recommend these to other students and approve the substitution of these courses for some courses listed above.

Under the thesis option, the master's thesis must be completed and defended in an oral examination administered by the Advisory Committee. Under the examination option, a 3-hour written examination is administered by the student's Advisory Committee. This option is rarely employed and only in unusual circumstances.

§ Note: May take one or the other of the following but not both:

CS 53600 or MGMT 54700
PSY 57700 or IE 57700

Note that COM 59000F and 59000G as well as COM 60000 and 60100 are restricted to **only COM Ph.D. students.
* unless taken under Area A
† When content is appropriate

Color Key
If Course Title Relevant

€ not offered in recent years due to staff shortages.

Color Key
If Course Title Relevant